

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/112609 A1

(51) International Patent Classification⁷: **A61B 5/103**,
19/00, G01L 5/22

(21) International Application Number:
PCT/GB2004/002524

(22) International Filing Date: 11 June 2004 (11.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0313794.0 14 June 2003 (14.06.2003) GB

(71) Applicant (for all designated States except US): **UNIVERSITY OF DUNDEE** [GB/GB]; Nethergate, Perth Road, Dundee DD1 4HN (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HEWIT, James, Robert** [GB/GB]; University of Dundee, Department of Mechanical Engineering, Nethergate, Perth Road, Dundee DD1 4HN (GB). **SLADE, Alan, Peter** [GB/GB]; University of Dundee, Department of Mechanical Engineering, Nethergate, Perth Road, Dundee DD1 4HN (GB). **PRIDHAM, Mark, Stuart** [GB/GB]; University of Dundee, Department of Mechanical Engineering, Nethergate, Perth Road, Dundee DD1 4HN (GB). **KEATCH, Robert,**

Philip [GB/GB]; University of Dundee, Department of Mechanical Engineering, Nethergate, Perth Road, Dundee DD1 4HN (GB).

(74) Agents: **MACDOUGALL, Donald, Carmichael et al.**; Marks & Clerk, 19 Royal Exchange Square, Glasgow G1 3AE (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

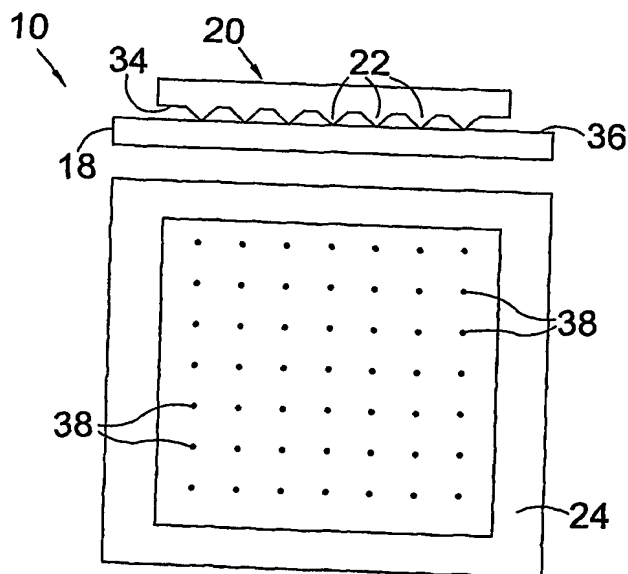
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: TACTILE SENSOR ASSEMBLY



(57) Abstract: There is disclosed a tactile sensor assembly, as well as a palpation assembly and a tactile probe each incorporating the tactile sensor assembly. The tactile sensor assembly has a particular use in surgery, such as minimal access surgery. In one embodiment, a tactile sensor assembly (10) is disclosed which includes a force transmission member (20) and a sensor (18), wherein the force transmission member (20) includes a plurality of projections (22) for transmitting an applied force to the sensor (18), and wherein the sensor (18) is adapted to detect said applied force and to output a signal indicative thereof.

WO 2004/112609 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.